In the Claims:

1. (currently amended) A method for acquiring packet synchronization in a packet type communication network, comprising the steps of:

providing a data packet having a framing format including a preamble split into a plurality of subpreambles of non-interleaved symbols;

for individual subpreamble and for combined subpreamble options, determine the following parameter:

$$\beta_i = \frac{1}{T_i^2} \int_{t_i}^{t_i+T_i} \left| r(t) \cdot e^{-j\hat{\phi}_i} \right|^2 dt;$$

where T_i is the preamble or subpreamble duration in each option, t_i is the preamble or subpreamble start time, and $\hat{\phi}_i$ is the estimated phase shift in each option;

determine synchronization using correlation with a priori known symbols using the subpreamble or combined subpreamble option which provides the lowest β.

2. (new) The method of claim 1 wherein said plurality of subpreambles is two, the two subpreambles being separated in time by other symbols.

3. (new) The method of claim 2 wherein said other symbols are one of other data signals or a priori known symbols.

4. (new) A method for acquiring packet synchronization in a packet type communication network, comprising the steps of:

providing a data packet having a framing format including a preamble split into a plurality of subpreambles of non-interleaved symbols;

determining whether any of said subpreambles are have been affected by at least one of impulse noise or burst noise; and

determine synchronization using the subpreambles of said plurality of subpreambles which have not been affected by said at least one of impulse noise or burst noise.

5. (new) The method of claim 4 wherein said plurality of subpreambles is two, the two subpreambles being separated in time by other symbols.

6. (new) The method of claim 5 wherein said other symbols are one of other data signals or a priori known symbols.